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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,297	03/01/2004	Angelito D. Siwa		9264

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EXAMINER

TWEEL JR, JOHN ALEXANDER

ART UNIT PAPER NUMBER

2636

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/790,297

Applicant(s)

SIWA ET AL.

Examiner

John A. Tweel, Jr.

Art Unit

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "said predefined service interval" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bazarnik** [U.S. 4,612,623].

For claim 1, the industrial timer unit for monitoring a service interval of an engine taught by **Bazarnik** includes the following claimed subject matter, as noted, 1) the claimed timer is met by oscillator (C) providing constant frequency clock signals used

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for timing the running time of the equipment, 2) the claimed timer control module is met by the programmed controller (No. 20), preferably a microcomputer chip with an internal memory for receiving the accumulated time from the timer, and selectively zeroing said accumulated time (Col. 10, Lns. 46-56), and 3) the claimed service indicator is met by the display module (No. 12) for alerting in response to a signal from the control module. However, the timer unit does not specifically recite the service indicator as an oil service indicator.

Oil is the most common service performed on any internal combustion engine. As this maintenance is the most common and well known service performed on an engine, the inclusion of oil service intervals in the reference of Bazarnik is considered an obvious variation thereon as the system does not perform any new or unexpected result given this knowledge.

For claim 2, the system of **Bazarnik** includes an internal memory for storing a predefined service interval.

For claim 3, the reference contains a keyboard to enable the user to enter the maintenance time and warning time.

For claim 4, the zeroing of the timer control unit as mentioned in the rejection above is user selectable.

For claim 5, the **Bazarnik** reference contains a visual alert.

For claim 6, the system includes an external memory chip (U3) for storing accumulated time.

For claim 7, the system includes a power supply (No. 16).

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For claim 8, low battery indicators are included in every vehicle sold in the United States. The inclusion of one in this system is considered an obvious variation on the prior art and therefore not a patentable innovation.

For claim 11, the timer unit for an engine taught by **Bazarnik** includes the following claimed subject matter, as noted, the claimed main body having 1) a claimed timer is met by oscillator (C) providing constant frequency clock signals used for timing the running time of the equipment, 2) the claimed timer control module is met by the programmed controller (No. 20), preferably a microcomputer chip with an internal memory for receiving the accumulated time from the timer, and selectively zeroing said accumulated time (Col. 10, Lns. 46-56), and 3) the claimed remote body including a service indicator is met by the display module (No. 12) located separate and apart from the service module (No. 10) for alerting in response to a signal from the control module. However, the timer unit does not specifically recite the service indicator as an oil service indicator.

The claim is interpreted and rejected for the same reasons and rationale as is mentioned in the rejection of claim 1 above.

For claim 12, the display module is adapted to be positioned in a passenger compartment of an automobile within sight of the driver.

For claims 13 and 14, the location of the service module is not considered a patentable innovation, as the location of the service module does not produce a new or unexpected result. The location is considered an obvious variation on the prior art.

For claim 15, wireless communications are not new in the field of electronics.

The inclusion of them in the present reference is not considered a patentable innovation.

5. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bazarnik** as applied to claims 1-8 above, and further in view of **Raffa et al** [U.S. 5,382,942].

For claim 9, the timer unit of **Bazarnik** includes the claimed subject matter as discussed in the rejection of claims 1-8 above. However, there is no mention of the oil service indicator providing an indication of the percentage of time in the interval.

The engine oil monitoring system of **Raffa** stores a remaining percent tachometer oil life, a remaining percent time oil life and a remaining percent odometer oil life. As seen in Figure 4, an oil percentage life indicator is shown that indicates the percentage left in the current oil's life. This reference is plain evidence that percentage has been used to indicate remaining oil life. The obvious advantage of this particular reference is that the user may change the rate at which the remaining percent of the oil left as a function of three different parameters, thus adapting it to multi-fuel engines and specific type of fuel.

As both references pertain to vehicle service indicators, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a percentage indication of time in an oil change interval in the system of Bazarnik for the

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purpose of indicating the oil life as a rate of different parameters as well as increasing the versatility of the system.

For claim 10, one percent change found in Raffa is computed using a quotient computation. Percentages are normally computed using a quotient algorithm.

6. Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bazarnik** in view of **Dix** [U.S. 6,677,854].

For claim 16, the system for monitoring a service interval for an internal combustion engine taught by **Bazarnik** includes the following claimed subject matter, as noted, the claimed timer unit having 1) the claimed timer is met by oscillator (C) providing constant frequency clock signals used for timing the running time of the equipment, 2) the claimed timer control module is met by the programmed controller (No. 20), preferably a microcomputer chip with an internal memory for receiving the accumulated time from the timer, and selectively zeroing said accumulated time (Col. 10, Lns. 46-56), and 3) the claimed service indicator is met by the display module (No. 12) for alerting in response to a signal from the control module. However, the timer unit does not specifically recite the service indicator as an oil service indicator.

The claim is interpreted and rejected for the same reasons and rationale as is mentioned in the rejection of claim 1 above. The reference also does not include a base unit communicating with the timer unit receiving the accumulated time and storing it in a database.

The remote vehicle diagnostic system taught by **Dix** includes a central controller (No. 200) with an associated transceiver (No. 202) to receive physical parameters of an engine such as temperatures, pressures, or fluid levels. One advantage of this system is to enable service personnel to be alerted of maintenance on a vehicle by receiving information from the central controller as well as the operator of the vehicle. This would ensure that the maintenance schedule is followed more closely.

The Bazarnik reference presents a useful platform onto which a transceiving system such as Dix may be included. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a transceiver and base unit in the system of Bazarnik for the purpose of insuring the close following of the service schedule.

For claim 17, the Dix reference monitors a plurality of vehicles having their particular identifiers.

For claim 18, both the vehicle unit and central controller of Dix include transceivers that communicate using wireless transmissions.

For claim 19, the Bazarnik reference zeros the accumulated time. The Dix reference includes a vehicle unit that responds to instructions from the central controller.

For claim 20, the Dix reference monitors a fleet of vehicles.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Bazarnik** [U.S. 4,404,641] automatically alerts a user of a preselected interval.



**Muhlberger et al** [U.S. 4,630,027] uses total fuel consumption as the basic parameter of the distance traveled.

**Sem et al** [U.S. 5,530,647] has selectable high and low operating speeds for accumulating operating time.


**Kasahara** [U.S. 6,637,218] reliably notifies a user that the time for changing oil has arrived.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Tweel, Jr. whose telephone number is 571 272 2969. The examiner can normally be reached on M-F 10-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Hofsass can be reached on 571 272 2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAT  
9/3/05

  
JOHN TWEEL  
PRIMARY EXAMINER